

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* TUKARAM K. HATWAR,  
J. RAMON VARGAS AND  
VIKTOR V. JARIKOV

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Appeal 2007-0162  
Application 10/690,940  
Technology Center 1700

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Decided: January 10, 2007

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Before EDWARD C. KIMLIN, BRADLEY R. GARRIS, and  
PETER F. KRATZ, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-8, 13, and 17-20. Claims 9-12 and 14-16 have been objected to by the Examiner. Claim 1 is illustrative:

1. A stabilized white-light-emitting OLED device, comprising:
  - a) an anode;
  - b) a cathode;
  - c) at least two light-emitting layers disposed between the anode and the cathode; and
  - d) a stabilizing substituted perylene material having a concentration selected so that it does not emit light to thereby increase the lifetime of the white-light-emitting OLED device.

The Examiner relies upon the following references as evidence of obviousness:

Codama	US 6,091,196	Jul. 18, 2000
Toguchi	US 6,753,097 B2	Jun. 22, 2004

Appellants' claimed invention is directed to a stabilized white-light-emitting OLED device comprising an anode, a cathode and at least two light-emitting layers disposed between the anode and cathode. In addition, one of the layers of the device comprising a substituted perylene material having a concentration such that it does not emit light and thereby increases the lifetime of the OLED device.

Appealed claims 1-4 stand rejected under 35 U.S.C. § 112, first paragraph, description requirement. Claims 1, 5, 13, and 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Codama. Claims 2-4, 6-8, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Codama in view of Toguchi.

We have thoroughly reviewed the respective positions advanced by the Appellants and the Examiner. In so doing, we will sustain the Examiner's rejection under § 112, first paragraph. However, we agree with

Appellants that the Examiner has not established a prima facie case of obviousness for the claimed subject matter. Accordingly, we will not sustain the Examiner's § 103 rejections.

We consider first the Examiner's rejection under § 112, first paragraph. We concur with the Examiner that Appellants' original Specification does not provide descriptive support for the recited "at least two light-emitting layers." While Appellants have furnished evidence that white-light-emitting OLED devices commonly include three layers, we do not subscribe to Appellants' position that such evidence supports the conclusion that "the claim fully conveys possession of the presently-claimed scope of the invention" (page 7 of principal Br., last paragraph.) As explained by the Examiner, the scope of the claim language at issue is much broader than a device containing two or three light-emitting layers. Indeed, the claim language sets no upper limit on the number of light-emitting layers. Consequently, we agree with the Examiner that the original Specification fails to convey to one of ordinary skill in the art that Appellants had in their possession the concept of OLED devices having an unlimited number of light-emitting layers.

We now turn to the Examiner's § 103 rejections. There is no dispute that Codama discloses a stabilized white-light-emitting OLED device comprising light-emitting layers containing substituted perylene material. However, as stressed by Appellants, Codama fails to teach or suggest employing a concentration of the substituted perylene material that does not emit light. Rather, Codama expressly teaches that perylene and rubrene are fluorescent substances having a luminescing function within the light-emitting layer (col. 11, ll. 64 *et. seq.*), and that "[a] rubrene concentration of

about 0.1 to about 10% by weight is preferable because the emission efficiency at this concentration is high" (col. 16, ll. 39-41). On the other hand, Appellants' Specification explains that the level of dibenzoperylene concentration is selected so that it is a non-luminescent dopant, and that the particular level at which the perylene is a non-luminescent dopant will vary depending on the properties of the layer (*see* paragraph bridging pages 27 and 28 of the Specification.) Hence, although the Specification discloses a dibenzo-perylene concentration of less than 5% for a particular layer, it can not be concluded that Codama's disclosure of a range that encompasses a concentration of 5% is a teaching of the claimed concentration of substituted perylene that does not emit light. In essence, we find that Codama's teaching of a concentration of substituted perylene that is sufficient to emit light is not tantamount to a teaching or suggestion of utilizing concentrations of the substituted perylene that do not emit light. Suffice it to say that Appellants' inventive concentration of substituted perylene ends where Codama's concentration begins.

The Examiner's additional citation of Toguchi for claims 2-4, 6-8, and 20 does not remedy the basic deficiency of Codama discussed above.

In conclusion, based on the foregoing, the Examiner's § 112 rejection of claims 1-4 is sustained, whereas the § 103 rejections of all of the appealed claims are reversed. Accordingly, the Examiner's decision is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(iv)(effective Sept. 13, 2004).

AFFIRMED-IN-PART

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